Enterprise Information Services

Section:	Application Maintenance & Support (AMS)
Unit:	Corrections Applications Solutions (CAS)
Position Number:	065-620-1583-005
Classification:	Senior Programmer Analyst (Specialist)
Date:	02/26/2016

Supervision: Under general direction of the Data Processing Manager II, Enterprise Information Services in AMS/CAS section the Senior Programmer Analyst (Specialist) (Sr. PA (Spec)) leads the development, implementation and maintenance of very complex Information Technology (IT) systems. The incumbent leads major IT projects to completion with almost complete independence.

Knowledge: This is the expert level and the Sr. PA (Spec) demonstrates true proficiency with respect to data processing concepts, practices, methods and principles, particularly the phases of the Software Development Life Cycle as implemented within the Enterprise Information Services Division. The incumbent has extensive knowledge of the Information Technology Project Management Framework. The incumbent is able to apply this knowledge to IT projects and is able to impart this knowledge to other co-workers. The incumbent supports and is responsible for the design and development of complex programs for CDCR. The incumbent works closely with other staff to ensure system changes are coordinated and implemented in a way that preserves the reliability and integrity of CDCR solutions. The incumbent designs and prototypes customer interfaces to create data entry screens and reports using various technologies and languages including, but not limited to; .NET, JAVA, VB, 4D, C#, HTML5, Oracle, SQL and Active Directory. The incumbent must meet customer's needs, and adhere to Departmental design standards. Writes system documentation and assists with the creation of user manuals and training as needed. Develops test plans and performs thorough testing of complex systems.

Guidelines: The Sr. PA (Spec) has extensive knowledge of the organization's business and takes into account the larger business perspective in proposing and designing IT solutions. The incumbent provides technical leadership in the development, implementation, and maintenance of very complex, mission critical and long-term IT application systems. The incumbent performs project planning, coordinates project resources, and leads team efforts to develop IT projects. To be successful, the incumbent is expected to lead one or more teams, assign work to team leaders, assign work to team members, and follow up to ensure assignments are completed accurately and on schedule. The incumbent also directs and motivates team members to achieve project goals. The Sr. PA (Spec) is responsible for following established procedures, system policies, operations and reference materials for the services provided. These include, but are not limited to: State Administrative Manual, Department Operations Manual and various instructional and user manuals for the hardware, software, and tools used and supported by CDCR.

Complexity: The work requires extensive research and analysis to determine the nature and scope of enhancements, opportunities and problems. The work contributes to the solution of complex problems, architecture reviews, strategic and tactical planning, change control management and clean system management as defined by control agencies and the department. The breadth of the Sr. PA (Spec) position includes analyzing, developing, and supporting enterprise-wide applications and information systems for departmental business functions. These applications can span several servers, firewalls, application and database servers, and are sometimes deployed to desktops throughout the State of California. Some of these systems are interactive web-based systems, with complex middleware, geographical information systems (GIS) components, and digital imaging technology.

Scope and Effect: The scope of the work involves planning, developing and implementing technological solutions that are essential to the mission of the overall organization and/or affect large numbers of people on a long-term basis. The Sr. PA (Spec) provides services that affect a significant number of CDCR business areas. These systems are deployed to thousands of state and local law enforcement personnel, and provide data essential to officer and public safety. When considering service enhancements or additions, the Sr. PA (Spec) assists in identifying impacts, appropriate methodology, steps to proceed and alternatives. The incumbent demonstrates team leadership competencies and models the organization's values.

Personal Contact: The Sr. PA (Spec) consults with external entities and advises management, administrative or executive staff on the planning, development, implementation and coordination of IT solutions. Incumbents communicate effectively, both orally and in writing, with subordinates, peers, clients and customers at all levels. Incumbents demonstrate presentation skills by preparing and conducting presentations and briefings for CDCR management and groups external to the CDCR. There is regular contact with IT staff, management, and external entities to coordinate problem resolution and ensure conformity of methods and practices. The Incumbent contacts users to discuss business and system requirements, contractors to provide contract oversight and contacts vendors to discuss existing or new technology.

Purpose of Contact: The Sr. PA (Spec) actively participates in meetings, hearings or presentations involving problems or issues of considerable consequence or importance. The incumbent will influence, motivate, persuade, and lead individuals or groups.

The actual duties of the incumbent will include the following:

50%	Application System Development, Enhancements, and Maintenance

- Resolve the most complex problems in application software, debug programs, determine and develop solutions, code, test, document, and install revised applications.
- Apply expert knowledge of preparing system, application program, and customer documentation using the appropriate templates and examples.
- Design, code and test the most complex application systems and integrate new systems with existing systems.
- Develop and review project deliverables in each phase of the System Development Life Cycle.
- Makes substantial technical decisions within a largely unsupervised environment but within a clear accountability framework.
- Test new operating environments and migrate existing systems.
- Identify opportunities for process improvement in the current applications and take the necessary steps to have them evaluated and/or implemented.
- Design new application databases or propose modifications to existing databases.
- Develop and maintain test environments.
- Work with consultants and vendors.
- Facilitate, prepare for, and participate in walkthroughs.

20%	Project Management, Plans, Schedules and Reporting

- Review and recommend approval of feasibility studies and other related documents.
- Understand, follow, and educate others in CDCR's Project Initiation Process.
- Prioritize work within the unit and assign work to team members.
- Follow up with team members on assignments.
- Direct the work of consultants and vendors.
- Accurately estimate resource needs for the most complex projects.
- As the Project Manager, develop project plans and schedules.
- As the Project Manager, develop contingency plans as needed.

- Coordinates project resources and leads team efforts to implement IT solutions, crossing organizational boundaries if necessary.
- Identify alternative project resources.
- Prepare, or assist in the preparation, of internal and external project reports.
- Provide estimates for project tasks.
- Report project status and deviations from approved schedules to supervisor, project lead, or Project Manager.
- Prepare workload information, report time expended on project activities, explain deviations from approved schedules, and continually re-evaluate project schedules.
- Prepare internal and external reports at all levels, including executive and control agencies.

20%	Application System Support

- Expert knowledge of the available tools, methods and procedures to complete assignments.
- Expert knowledge of security concerns, data back-up and recovery procedures.
- Participate in hardware and software procurements.
- Provide application help desk support to customers, including the most complex problems.
- Review, develop and approve impact assessments of proposed executive and legislative changes.
- Understand the political and regulatory issues of the organization.
- Develop contingency and operational recovery plans.
- Understand the business enterprise and the goals and mission of the organization.
- Research abnormal data conditions and correct erroneous data caused by program problems.
- Knowledge of database administration issues with regard to performance.
- Research, prepare, and deliver presentations to customers and management.
- Keep abreast of new developments in the industry.
- Understand, follow, and educate others in configuration management.

10%	Methodologies, Standards, Training and Others

- Represent the CDCR at IT conferences and expositions.
- Develop templates and examples for system, application, program, and customer documentation.
- Participate in formal and informal advanced training programs to strengthen programmer/analyst skills and knowledge of methodologies, techniques, tools, and packages.
- Act as a mentor and/or spokesperson in application development and project management best practices.
- Recommend software products that will benefit the organization.
- Train or mentor staff in complex technical areas.
- Identify opportunities for process improvement of policies, methodologies and standards and take the necessary steps to have them evaluated.
- Evaluate commercial software products to determine potential benefit to the organization.
- Participate in Division meetings and other activities as required.

Employee: _____ Date: _____

Immediate Supervisor: _____ Date: _____